USAID/GEO

GUYANA ECONOMIC OPPORTUNITIES

Conformity Assessment
Product Certification
Training Program: ISO 9001: 2000
and
Introduction to: ISO 14000

Trip Report
May 15 – 25, 2003

Prepared by

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Submitted by:
Chemonics International Inc.

In association with
Management Systems International, Inc

To:
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June 2003

Summary Report for Conformity Assessment Activities 15-25 May 2003

Contents

Conformity Assessment Interest Group Meeting 15 May 2003

Chaired By: Dr. Chatterpaul Ramcharran, Director, Guyana National Bureau of Standards

Subject: Review of the GEO Project Report: Scott to Whitney 17 April 2003

Attendees:

Number	Name	Organization
1	Predeepa Bholanath	GFC
2	Naneeka Taylor	F & d Dept.
3	Lana Lawrence	IAST
4	Brenda Forde	NARI
5	Nizam Hussan	NGMC
6	Robindraunauth Bridgemongal	GNBS
7	Jowala Somai	GNBS
8	Dr. Chatterpaul Ramcharran	GNBS
9	Jim Scott	GEO Project

Registration to ISO Quality and Environmental Management Standards

Guyana National Bureau of Standards

The Guyana National Bureau of Standards has decided to pursue registration of ISO 9001: 2000 to establish a leadership role for organizations within Guyana to also seek registration to ISO 9001:2000.

A suggested registrar for the GNBS is:

AQA International
1107 Belleview Avenue
Columbia, South Carolina
29201 USA
803 779 8150 Phone
803 779 8109 Fax

Quality Management System Registration (ISO 9001: 2000)

The Guyana National Bureau of Standards is actively encouraging companies and organizations within Guyana to achieve registration to ISO 9001: 2000. Registration to this standard would require each organization to implement a quality system that would be internationally recognized.

Countries involved in international trade hold the view that organizations having recognized quality management systems have demonstrated that they are capable of producing quality products that meet customer expectations. Registered companies would constitute the foundation of a conformity assessment system in support of international trade.

Environmental Management System Registration (ISO 14001: 1996)

The Guyana National Bureau of Standards is actively encouraging companies and organizations within Guyana to achieve registration to ISO 14001: 1996. Registration to this standard would require each organization to implement an environmental system that would be internationally recognized.

Registered companies Guyana Registered companies would constitute the foundation of a conformity assessment system in support of international trade, particularly in the area of organically produced foods.

Joint Registration to ISO 9001: 2000 and ISO 14001: 1996

Interest and activities associated with the quality of goods and services provided to the customer are, by their nature, integrated with those of environmental management. The quality of an agricultural product such as fresh fruits and vegetables or seafood, such as shrimp and finfish, is intimately connected to environmental issues. Such issues require a management system that considers both attributes. Joint registration by a single registrar is common and available.

Registration Bodies - Recommendation for Immediate Implementation

The use of registration bodies outside of Guyana for organizations within Guyana would expedite the achievement of registration of such organizations in support of an internationally recognized conformity assessment process.

Accreditation to Conformity Assessment Standards

Product (Service) Certification Bodies (ISO/IEC Guide 65)

A product (service) certification process is needed in Guyana to provide acceptance for products and services involved in export or import activities. ISO/IEC Guide 65 provides an organizational structure for such certification. A certification process is needed in Guyana to certify products or services for export and import. The process could be established within the framework of existing governmental agencies or as an organizational element of GNBS. GNBS could mentor and oversee an ISO/IEC Guide 65 system.

An organization accredited to ISO/IEC Guide 65 would conduct the process of product (service) certification utilizing a laboratory accredited to ISO/IEC 17025 and an inspection body accredited to ISO/IEC 17020.

Laboratories (ISO/IEC 17025)

Certificates of calibration or analysis are required for certification of products involved in export or import activities. Reports from accredited laboratories provide input to the product certification process.

Additional laboratories are needed to support a product certification in support export and import activities. Additional laboratory capability is needed in nutritional labeling for processed foods, evaluation of pesticide residue in food, forest product testing, and in furniture testing. Such testing is vital to product certification. Laboratories providing such testing services must be accredited to support the ISO/IEC Guide 65 product certification process for exports or imports.

Inspection Bodies (ISO/IEC 17020)

Certificates of inspection are required for certification of products or services involved in export or import activities. Reports from accredited inspection bodies provide input to the product or service certification process conducted according to ISO/IEC Guide 65.

Registration Bodies for Commercial, Industrial, and Governmental Organizations

Accreditation bodies recognized under ISO/IEC Guide 61 provides accreditation of registration bodies. GNBS indicates that present plans are for organizations inside Guyana seeking registration should select accredited registrars recognized under ISO/IEC Guide 62 and/or ISO/IEC Guide 66. These organizations are usually in the private sector.

Accreditation Bodies - Recommendation for Immediate Implementation

The use of accreditation bodies outside of Guyana for organizations within Guyana would expedite the achievement of accreditation and registration of such organizations in support of an internationally recognized conformity assessment process.

Caribbean Regional Organization for Standards and Quality

GNBS presently plans to support CROSQ in the formation of regional accreditation bodies and registration bodies. Until such time as CROSQ is prepared to conduct accreditation or registration activities recognized under ISO standards, such needed activities are to be provided from sources available.

Proposed Guyana Structure for Product Certification Scheme

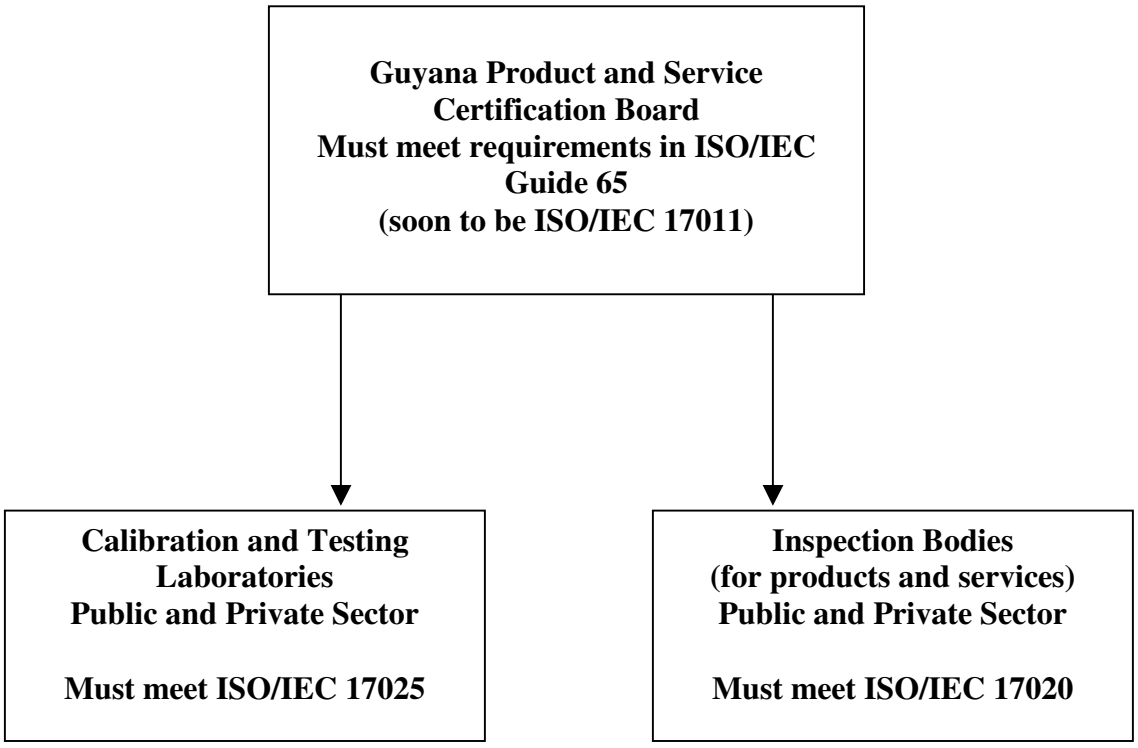

FIGURE 1

Accreditation Bodies – Availability

Product Certification Bodies (ISO/IEC Guide 65) – Accreditation resources available from the

American National Standards Institute
11 West 42nd Street
New York, New York 10036
Phone 888 267 4783
Fax 212 398 0023
www.ansi.org

Laboratories (ISO/IEC 17025) - Accreditation resources available from the

American Association for Laboratory Accreditation
5301 Buckeystown Pike, Suite 350
Frederick, MD 21704
Phone: 301 644 3248
Fax: 301 662 2974
Web Site: www.a2la.org

Inspection Bodies (ISO/IEC 17020)

American Association for Laboratory Accreditation
5301 Buckeystown Pike, Suite 350
Frederick, MD 21704
Phone: 301 644 3248
Fax: 301 662 2974
Web Site: www.a2la.org

Registration Bodies for Commercial, Industrial, and Governmental Organizations
(ISO/IEC Guide 62 for Registrars of Quality Management Systems)
(ISO/IEC Guide 66 for Registrars of Quality Management Systems)
A list is available of registrars is available from:

Registrar Accreditation Board
611 East Wisconsin Avenue
PO Box 3005
Milwaukee, WI 53201-3005
Phone 888 722 2440
Fax 414 765 8661
www.rabnet.com

ISO/IEC 17025 Task Group Meeting 15 May 2003

Chaired By: Dr. Chatterpaul Ramcharran, Director, Guyana National Bureau of Standards

Subject: Review of the GEO Project Report: Scott to Whitney 17 April 2003

Attendees:

Number	Name	Organization
1	Allison Peters	GFC
2	Chinta Ramprasad	F & d Dept.
3	Bruce Haynes	IAST
4	Basil Dey	NARI
5	Rajkumarie Sookraj	NGMC
6	Henry Merchant	GNBS
7	Clyde G. Thompson	
8	Michelle Lutchman	
9	Sandrene Abrams	GGMC
10	Robindraunauth Bridgemongal	GNBS
11	Candaicy David	GNBS
12	Jewel Sears	F & D Dept.
13	Patricia London-Payne	GSC
14	Dominique McKlmon	GGB
15	Ramvaltie Leavon	GNBS
16	Candelle Walcott	GNBS
17	Jowala Somai	GNBS
18	Dr. Chatterpaul Ramcharran	GNBS
19	Jim Scott	GEO Project

Accredited Laboratories in Guyana

There are none at the present.

Previous Experience with ISO 9001 and ISO 14001

Two of ten have pursued registration.

Product Certification

A system based upon ISO/IEC Guide 65 utilizing laboratories accredited to ISO/IEC 17025 and inspection bodies accredited to ISO 17020 should be established to address product certification for exports and for imports.

GNBS Registration to ISO 9001: 2000

GNBS intends to establish a quality management system to address the requirements of ISO 9001: 2000 and to seek registration.

Recommendations

[A recommendation from the previous report is reiterated here for emphasis. The establishment of Task Groups to facilitate implementation of the listed standards is very important.]

Task Groups for ISO/IEC Guide 65, ISO/IEC 17025, ISO/IEC 17020, ISO 9001, and ISO 14001

Task Groups should be organized to facilitate the implementation of the requirements in the ISO standards. Each Task Group should be charged with the task of preparing draft documents required by the respective standard. These drafts should address the minimum requirements in the respective standard.

A set of the drafts could then be distributed to the specific member organization for review and revision. Such revision could add text to address specific additional needs. The organization should *not* remove text from the original drafts. The intent should be that the Task Group drafts should meet the minimum requirements in the standard of interest.

The intent of such an approach should be to minimize the use of resources and maximize productivity. Each Task Group should develop an audit team to conduct gap audits to identify existing elements that may be used in the system and to identify the elements that need to be established. Such Task Groups should be required to meet as scheduled and work under a strategy defined in a Gantt chart to produce the documents needed for accreditation.

Suggested Task Groups:

ISO/IEC Guide 65 Task Group
ISO/IEC 17025 Task Group
ISO/IEC 17020 Task Group
ISO 9001 Task Group
ISO 14001 Task Group

Contributions of Model Documents

Examples of draft documents for a laboratory quality management system were provided. Included were drafts for:

ISO/IEC 17025 Quality Manual	Records Control Procedure
Document Master List	Control of Nonconforming Work Procedure
Document Control Procedure	Corrective Action Procedure
Management Review and Preventive Action Procedure	

These documents could be used as models for other procedures required for implementing the ISO/IEC 17025 standard in preparation for laboratory accreditation. With minor review and revision, these documents could be used in the implementation of ISO 9001 and ISO 14001 in the pursuit of registartion.

Pesticide Residue Laboratory

A web site address was provided for possible exploration for processed food labeling criteria and for test methods: http://www.access.gpo.gov\nara\cfr\index\html

Nutrition Laboratory

A web site address was provided for possible exploration for pesticide test methods. www.ams.usda.gov/science/pdp/index.htm

Forest Products and Furniture Testing Laboratory

The need for a forest products and furniture testing laboratory was identified during the ISO 9001: 2000 gap assessment of GNBS. Testing programs could be established as separate entities.

Auditor Training

Auditor training including the audit requirements in ISO 19011 was requested for scheduling in August 2003. Accredited ISO 9001 Lead Auditor and ISO 14001 Lead Auditor classes were requested for February or March of 2004.

ISO 9001: 2000 Gap Assessment

A separate assessment (audit) report is prepared according to ISO 19011 and is transmitted electronically with this report.

Proposed Guyana Structure for Accreditation

(LONG RANGE)

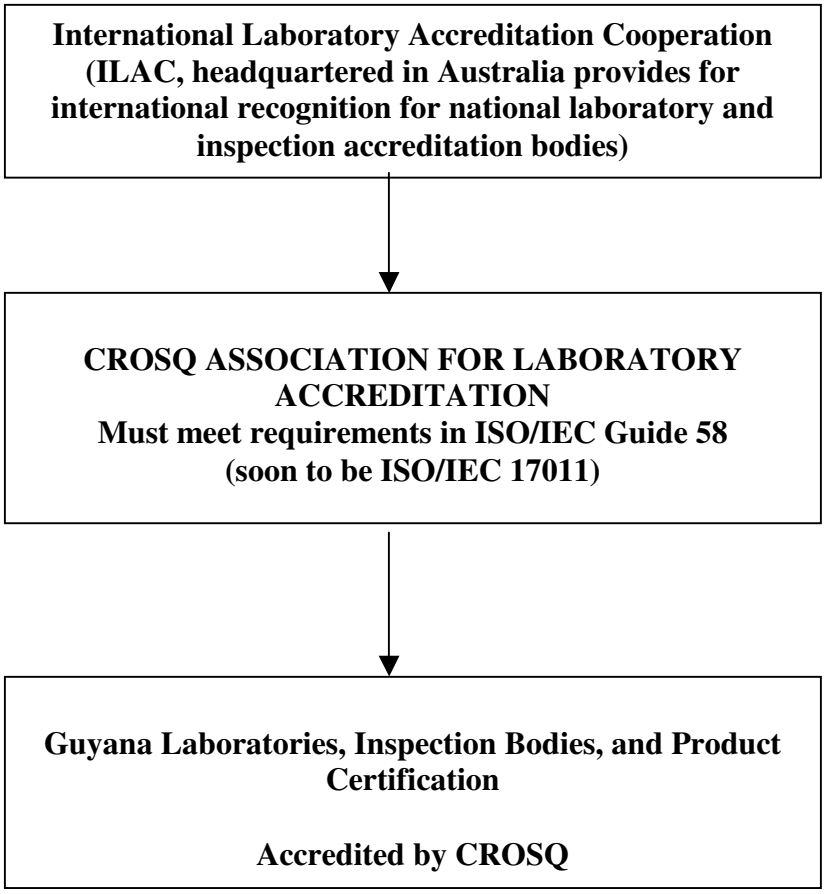

FIGURE 2

Proposed Guyana Structure for Registration

(LONG RANGE)

FIGURE 3

Revised Outline for a Conformity Assessment System for Guyana

Resources for Accreditation and Registration

Product Certification Body Accreditation

Until a decision is reached concerning the establishment of a product certification body, utilization of an external accreditation body would be required for product certification body accreditation in Guyana. The American National Standards Institute conducts such accreditation. Training in ISO/IEC Guide 65 and ISO/IEC 17020 will be needed and an ISO/IEC Guide 65 management system would have to be established prior to application to ANSI for accreditation.

Laboratory Accreditation

Until a decision is reached concerning the establishment of a laboratory accreditation body, utilization of an external accreditation body would be required for laboratory accreditation in Guyana. The American Association for Laboratory Accreditation could provide accreditation that is recognized by the following through Mutual Recognition Arrangements (See Appendix 1):

ILAC - International Laboratory Accreditation Cooperation
NACLA - National Cooperation for Laboratory Accreditation
APLAC - Asian Pacific Laboratory Accreditation Cooperation
EA - European Cooperation for Accreditation

Inspection Body Accreditation

Until a decision is reached concerning the establishment of an inspection accreditation body, utilization of an external accreditation body would be required for inspection accreditation in Guyana.

Registration of GNBS to ISO 9001-2000

Until a decision is reached concerning the establishment of a registration accreditation body, utilization of an external registration body would be required for registration in Guyana.

Pesticide Residue Laboratory

A pesticide residue laboratory capability is needed to evaluate produce, processed foods, fish and shrimp for export to markets requiring pesticide residue analysis for evaluation against product acceptance criteria. Technology for consideration would be GC/MS and HPLC/MS for low-level detection.

Nutrition Laboratory

A nutrition laboratory capability is needed to evaluate produce, processed foods, fish and shrimp for export to markets requiring nutritional labeling criteria for consumer markets.

Forest Products and Furniture Testing Laboratory

The need for a forest products and furniture testing laboratory was identified during the ISO 9001: 2000 gap assessment of GNBS. Testing programs could be established as separate entities.

Prospectus of Issues for the Proposed Visit 11-15 August 2003

(1) Review of ISO/IEC 17025 draft documents for conformance to the standard (two days).

(2) ISO 19011 auditor training class (four days).

(3) Discuss plans for ISO 9001 and ISO 14001 Lead Auditor classes projected for delivery in early 2004. Discuss plans for ISO/IEC Guide 65 and ISO/IEC 17020 training classes for delivery to support Task Groups.

(4) Task Group Work Sessions (four days).

Laboratory Accreditation Task Group
Product Certification Task Group
Inspection Accreditation Task Group
Quality / Environmental Task Group

These Task Groups should be organized with the following:

- a chairperson;
- a schedule for monthly work sessions;
- identification of the required documents for the standard of interest;
- assignment of individuals to develop “straw man documents”;
- a Gantt Chart for implementing documents and elements required by the standard of interest;
- as many draft documents (prepared as time permits) for review.

Documents should be prepared according to ISO TR 10013 and the ISO Document Preparation documents provided in the course materials. The draft documents should be prepared following the examples of the ISO/IEC 17025 documents provided as models during the May visit.

Training Attendees and Evaluation of Training

Course:	ISO 9001 Implementation with Introduction to ISO 14001
Location:	Cara Inn, Georgetown, Guyana
Training Dates:	20-24 May2003
Instructor:	James H. Scott

No	Name	Organization	Phone	
1	Mr. Henry Merchant, Quality Assurance Manager	Banks DIH Limited	226 8795	C
2	Mr. Azim Hosein	Caribbean Rice Industry Development Ntwk	222 4430-2	C
3	Mr. Chatterpaul Ramcharron, Director	Guyana National Bureau of Standards	225 9041	S
4	Ms. Amanda Das	Demerara Distillers, Ltd.	265 4193	C
5	Mr. Khemraj Bhoowan	Guyana National Bureau of Standards	225 6226	C
6	Mr. Deonarine Mahadeo	Guyana Stockfeeds Ltd.	265 4671-4	C
7	Mr. Eion Oudkerk	Guyana Shipping Corporation	226 8896	C
8	Mr. Peter Park	Aeronautical Engineer School	623 5990	C
9	Mr. Sharma Dwarka	Guyana Sugar Corporation	622 5116	C
10	Ms. Patricia London-Payne	Guyana Sugar Corporation	220 2050	C
11	Mr. Balram Boodhoo	Guyana Thermoplastic Ltd.	220 2050	C
12	Mr. Balwant Algu	Guyana National Bureau of Standards	225 9013	C
13	Mr. Chen Rong, Managing Director	G & C Sanata Company, Inc.	227 8198	S
14	Mr. Rafeek Ferouz	Twins Manufacturing Chemists	225 6321	C
15	Ms. Nichola Ramchurjee	Demerara Distillers, Ltd.	265 6000	C
16	Ms. Ramrattie Karan	Guyana National Bureau of Standards	225 6226	C
17	Ms. Shuné Vickerie	Guyana National Bureau of Standards	225 6226	C
18	Mr. Jowala Somai	Guyana National Bureau of Standards	225 9041	C
19	Mr. Fitzroy Fletcher, Managing Director	Adventure Manufacturing Co. Ltd.	222 4092	D
20	Ms. Candelle Walcott	Guyana National Bureau of Standards	225 9041	C
21	Mr. Robindranauth Bridgemongal	Guyana National Bureau of Standards	225 6226	C
22	Ms. Ronika Gomes	G & C Sanata Company, Inc.	231 7273	S
23	Mr. Haimnarine Mahadeo	New Guyana Pharmaceutical Corporation	265 4262	C
24	Mr. Sadeek Mohamed	Fiber Tech Industrial Plastics	----------	N
25	Copy of Record	Guyana National Bureau of Standards		
26	Copy of Record	GEO Project Office		

C = Certificated Received. S = Did not attend Saturday. D = Attended first day only. N: Did not attend.

Course Evaluation

Data Set: Nineteen responses out of twenty-four were provided. One “no show”; One left early, three did not attend the last day.

Instructions to Participants

In order to address the needs of course participants, please provide your input. This information is appreciated and is vital to commitment to continual improvement. The scale below ranges from 5 to 1. The values are defined below:

5 = Excellent 4 = Very Good 3 = Good 2 = Fair 1 = Poor

	5	4	3	2	1
1. Clarity of material content	14/19	5/19			
2. Usefulness to your needs	13/19	6/19			
3. Opportunity to ask questions	17/19	2/19			
4. Instructor's responsiveness	17/19	2/19			
5. Instructor's enthusiasm	19/19				
6. Real Life Experiences *	1/19				

* This comment was added by one student.

Student comments were taken from the evaluation mostly as stated. Some shortening of a few comments was made in the interest of brevity.

Please describe your experience in this course.

Very enlightening and interesting. The different perspective on interpretation was good and the sharing of experience from different types of companies were beneficial. The example(s) supplied by the instructor were invaluable. Very useful for my organization. A number of the subclauses within the standard were clarified. This has been most useful. Very educational and informative. This course was knowledgeable, informative and interesting. Gain knowledge about ISO 9001 – 14001 and be more effective. Enlightening and practical. Enjoyable experience. It was refreshing. A gap that needed to be filled. Informative sessions which would aid me in the transition to this standard. The standard was clearly understood. Learning and knowledge-based. Good experience in relating the application of the standard. I am now equipped with the skills to develop procedures and manual. Tremendous knowledge and appreciation of ISO 9001 and 14001 gained. It was a learning, stimulating, broadening the horizons experience. Great. Foundation knowledge on the implementation of ISO 9001:2000. I'm competent now to prepare a quality manual to address the requirements of the standard. It was very informative and gave me a clear vision in what to expect and how to implement an EMS. This is my first formal training in ISO 14001. Very challenging and interesting. Course was informative and would be beneficial for implementing the standard at my organization.

What is your opinion concerning the length of the course?
Too short ___3____ Sufficient ___16___ Too long ___0___

What other course topics would be of interest to you?

System documentation and auditing. ISO 17025. Auditing. ISO 9001 Lead Auditor. Internal Auditor. Gap Assessment. Internal auditing and Registration. ISO 19011, ISO Guide 65, Lead Auditor. ISO 17025. Health & Safety. ISO 19011. Lead Auditor training. CE Certification and Risk Analysis [Process Management]. Auditing. ISO 17020, ISO 19011, ISO 10015. ISO 9004:2000. Systems Audits. ISO 10015 (training). Auditing 19011 to QMS and EMS, Inspection and Certification. None.

Would you recommend the course to colleagues? __Yes_16____No_0___
__Yes 1 Definitely No_0___
__Yes 1 and Enthusiastically No_0___
__Yes 1√ No_0___

Total 19

What changes to the course would you recommend?

Twelve - No Changes; One – Exam at the end of the course.
One – Use written examples attached at the end of the (sub)clauses in the training manual (notes). Video sessions instead of chalk and talk methods. More practical examples of nonconformances, corrective actions, preventive actions. Increase sessions (for ISO14001). Preparation of quality system documents. Just a practical development of the quality manual for a local company. Establish more focus (Task / Task) groups so there is a greater effort for each discipline. More group interaction, smaller groups with assigned case studies.

APPENDIX 1

COOPERATING LABORATORY ACCREDITATION SYSTEMS

A2LA seeks to establish cooperative arrangements with laboratory accreditation systems in other countries and in the United States. These arrangements facilitate the acceptance of test and calibration data between A2LA-accredited laboratories and other countries/economies. A2LA will testify to the competence of each accreditation system with whom it has an MRA and attest to the fact that they follow the recognized norm for operating such systems, ISO Guide 58, and use ISO/IEC 17025 (and ISO/IEC Guide 25 until December 31, 2002) as the basis for the accreditation of laboratories. Copies of the MRAs are available upon request. A2LA's current cooperative arrangements include the following:

Asia Pacific Laboratory Accreditation Cooperation (APLAC)

The Mutual Recognition Arrangement with the Asia Pacific Laboratory Accreditation Cooperation (APLAC), which includes both testing and calibration, was signed on November 19, 1997 and establishes cooperation among many accreditation bodies throughout the Asia-Pacific Region. The contact information for A2LA's partner accreditation bodies that are now signatories to the APLAC MRA is located at http://www.aplac.org/members/members_mra.htm.

European Cooperation for Accreditation (EA)

The Bilateral Mutual Recognition Agreement with the European Cooperation for Accreditation (EA), which includes both testing and calibration, was signed on September 21, 1999. The Agreement is meant to facilitate the acceptance of test and calibration data with a number of European countries whose national accreditation bodies have signed the EA Multilateral Agreement (MLA). EA promotes the recognition and acceptance in all the MLA countries of certificates and reports issued by organizations accredited by national accreditation bodies who have signed the MLA. The contact information for A2LA's partner accreditation bodies in Europe that are now signatories to the EA MLA is located at the MLA link on the following web site: http://www.european-accreditation.org.

Inter-American Accreditation Cooperation (IAAC)

The Inter-American Accreditation Cooperation is an association of accreditation bodies and other organizations interested in conformity assessment in the Americas. The Multilateral Recognition Arrangement (MLA) with the Inter-American Accreditation Cooperation (IAAC) was signed on October 24, 2002. The first three signatories are A2LA, INMETRO of Brazil and SCC of Canada. By signing the arrangement, A2LA, SCC and INMETRO agree to formally recognize and promote the equivalency of each other's laboratory accreditation. Since these three bodies already recognize each other under the ILAC (International Laboratory Accreditation Cooperation) Mutual Recognition Agreement (MRA), this first signing is largely symbolic but forms the foundation for expanding recognition in the Americas. To obtain more information on the current IAAC MLA signatories, please visit the IAAC web site at: http://iaac-accreditation.org/intro.html

International Laboratory Accreditation Cooperation (ILAC)

The Mutual Recognition Arrangement (MRA) with the International Laboratory Accreditation Cooperation (ILAC) was signed on November 2, 2000 and entered into force on January 31, 2001. The original Arrangement was signed by 36 laboratory accreditation bodies from 28 economies worldwide. The primary aim of the arrangement is promote the acceptance of technical test and calibration data for exported goods. A2LA was one of three U.S. signatory bodies. The up-to-date contact information for A2LA's partner accreditation bodies that are now signatories to the ILAC MRA is listed at the Arrangement link on the following web site: http://www.ilac.org.

National Cooperation for Laboratory Accreditation (NACLA)

The Mutual Recognition Arrangement with the National Cooperation for Laboratory Accreditation (NACLA), a U.S. accreditation body recognition arrangement, was initially signed on September 29, 2000. Signatories to the NACLA MRA agree to recognize the technical equivalency of each other's accreditation. The current list of NACLA-recognized U.S. accreditation bodies is listed at http://www.nacla.net/Recognized_ABs/recognized_abs.htm.